



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,190	11/07/2001	Takayuki Nimiya	OGW-0203	4895

7590 11/23/2004

RADER, FISHMAN & GRAUER, PLLC  
Suite 501  
1233 20th Street, N.W.  
Washington, DC 20036

EXAMINER

VIG, NARESH

ART UNIT	PAPER NUMBER
----------	--------------

3629

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/986,190

Applicant(s)

NIMIYA ET AL.

Examiner

Naresh Vig

Art Unit

3629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

This is in reference to response received on August 27, 2004 to the office action mailed on June 8, 2004. There are 13 claims, claims 13 – 25 pending for examination.

### ***Response to Arguments***

Applicant's arguments with respect to claims 13 - 25 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13 – 20, and 22 – 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chikiri et al. US Patent 5,727,777 hereinafter known as Chikiri in view of Flag Telecom Limited hereinafter known as FlagTelecom.

Regarding claim 13, Applicant is building a overhead structure (product) which the applicant can be rented out or sold by the applicant. Method of constructing an overhead infrastructure using specific tools is a business and design choice. One of ordinary skill in the art can build the overhead infrastructure using different tools. The overhead structure built by one of ordinary skill in the art is the product which could be rented out or sold, and, applicant also claims a overhead structure (product) which is built to be rented out or sold. Chikiri teaches system and method for building the overhead infrastructure. Chikiri teaches:

installing a basic construction, said basic construction including utility poles, a tensile line drawn between said utility poles, a plastically deformable coil suspended by said tensile line, and an overhead cableway, said overhead cableway being the space bounded by said plastically deformable coil.

Chikiri does not teach renting or selling a portion of said overhead cableway to a business conductor, wherein an administrator rents or sells said portion to said business conductor. However, FlagTelecom teaches system an method of cableway. Flag Telecomm teaches the cable way can be leased or sold customers like Internet Service Providers [page 7].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chikiri as taught by FlagTelecom to recover implementation costs by selling portions of the infrastructure, generate residual income by leasing the infrastructure.

Regarding claim 14, Chikiri in view of FlagTelecom teaches administrator (construction Manager) administrates said basic construction [FlagTelecom page 15].

Regarding claim 15, Chikiri in view of FlagTelecom teaches extending at least one overhead line along a overhead cableway.

Regarding claim 16, it would have been obvious to one of ordinary skill in the art at the time the invention was made that businesses are known to purchase or lease Right Of Way from property owners. For example, telephone utility company getting Right Of Way from a power utility company (telephone company install their cable on electric company poles), power utility company getting Right Of Way from railway company (power utility company installing their own poles and cables). A business gets Right Of Way to same capital investment, meet local jurisdiction rules and regulations, minimize the infrastructure construction costs. Chikiri in view of FlagTelecom teaches capability to have a business conductor (ISP) extends said at least one overhead line along said overhead cableway [Chikiri Fig. 1, 7].

Regarding claim 17, as responded to earlier in response to claim 16, it would have been obvious to one of ordinary skill in the art at the time the invention was made that it is a business decision on who is responsible for managing the product installed. For example, in power utility company getting right of way from railway company, in

Art Unit: 3629

some circumstances, it is the power utility company who manages the overhead line (product installed by power utility company). Although, Chikiri in view of FlagTelecom does not teach said business conductor manages said at least one overhead line, one of ordinary skill could have modified Chikiri in view of FlagTelecom and make the conductor manage their installed product to save on support expenses liability.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chikiri in view of FlagTelecomm and make the conductor manage their installed product to save on support expenses liability.

Regarding claim 18, it is a business choice to decide on fee structure. Chikiri in view of FlagTelecom teaches business conductor with rights for using said overhead cableway for rent or for sale with a fee according to a number and weight (business choice on criteria for fee structure) of said at least one overhead line managed by said business conductor.

Regarding claim 19, Chikiri in view of FlagTelecom teaches plurality of overhead lines is extended along said overhead cableway.

Regarding claim 20, Chikiri in view of FlagTelecom does not teach prior to the step of installing said basic construction, the method further comprises estimating the number of overhead lines to be extended within said overhead cableway, and, estimating a maximum load supported by said overhead cableway, the weight for said

Art Unit: 3629

number of said overhead lines and the distance between said utility poles being used to estimate said maximum load. However, FlagTelecom teaches hiring a construction manager. Official notice it taken that it would have been obvious to one of ordinary skill in the art at the time the invention was made that business are know to make estimations prior to starting a construction project.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chikiri in view of FlagTelecom and estimating the number of overhead lines to be extended within said overhead cableway, and, estimating a maximum load supported by said overhead cableway, the weight for said number of said overhead lines and the distance between said utility poles being used to estimate said maximum load.

Regarding claim 22, Chikiri in view of FlagTelecom teaches number is an integer greater than one.

Regarding claim 23, Chikiri in view of FlagTelecom teaches number determines the section area of said overhead cableway.

Regarding claim 24, Chikiri in view of FlagTelecom does not teach said plastically deformable coil has a metal wire formed in a spiral shape and synthetic resin coated on a surface of said metal wire (how the plastically deformable coil is constructed). Method of constructing plastically deformable coil using specific material is

Art Unit: 3629

a business and design choice. One of ordinary skill in the art can build plastically deformable coil using different material and still be able to perform the method of Chikiri in view of FlagTelecom and build plastically deformable coil has a metal wire formed in a spiral shape and synthetic resin coated on a surface of said metal wire to meet design requirement of the infrastructure.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chikiri in view of FlagTelecom and build plastically deformable coil has a metal wire formed in a spiral shape and synthetic resin coated on a surface of said metal wire to meet design requirement of the overhead infrastructure.

Claims 21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chikiri et al. US Patent 5,727,777 hereinafter known as Chikiri in view of Flag Telecom Limited hereinafter known as FlagTelecom and Wettengel et al. US Patent 5,7897,01 hereinafter known as Wettengel.

Regarding claim 21, Chikiri in view of FlagTelecom does not teach the tensile strength of said tensile line is based on said maximum load. However, Wettengel teaches tensile strength of said tensile line is based on said maximum load.



Art Unit: 3629

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chikiri in view of FlagTelecom as taught by Wettengel to ensure that the cable does not break under load.

Chikiri in view of FlagTelecom and Wettengel teach plastically deformable coil is structurally adapted to support said number of said overhead lines.

Regarding claim 25, Chikiri in view of FlagTelecom and Wettengel does not teach the project implementation plan for the overhead infrastructure. However, Chikiri in view of FlagTelecom and Wettengel teach installation manager (one of the basic function of a construction manager is to generate and/or follow project plan), cables being installed on the poles.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to that Chikiri in view of FlagTelecom and Wettengel teaches step of installing said basic construction:

drawing said tensile line between said utility poles;  
surrounding said tensile line axially with said plastically deformable coil;  
attaching a portion of said plastically deformable coil to said tensile line with a cram member; and

elongating said plastically deformable coil along said tensile line from said cram member toward one of said utility poles to form said overhead cableway.

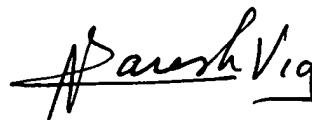
***Conclusion***

Applicant is required under 37 CFR '1.111 (c) to consider the references fully when responding to this office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naresh Vig whose telephone number is 703.305.3372. The examiner can normally be reached on M-F 7:30 - 5:00 (Alt Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on 703.308.2702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Naresh Vig', with a stylized flourish at the end.

Naresh Vig  
Patent Examiner  
November 17, 2004